

METHODS AND APPARATUS FOR COOLING
TURBINE ENGINE COMBUSTOR EXIT
TEMPERATURES

ABSTRACT OF THE DISCLOSURE

A method facilitates assembling a combustor for a gas turbine engine. The method comprises coupling an inner liner to an outer liner such that a combustion chamber is defined therebetween, positioning an outer support a distance radially outward from the outer liner, and positioning an inner support a distance radially inward from the inner liner. The method also comprises forming at least two rows of impingement openings extending through at least one of the inner support and the outer support for channeling impingement cooling air therethrough towards at least one of the inner liner and the outer liner, and forming at least one row of dilution openings extending through at least one of the inner liner and the outer liner for channeling dilution cooling air therethrough into the combustion chamber